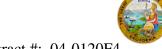
### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001756 Address: 333 Burma Road **Date Inspected:** 10-Mar-2008

City: Oakland, CA 94607

OSM Arrival Time: 1800 **Project Name:** SAS Superstructure **OSM Departure Time:** 500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Huang Wen-Pang N/A **Inspected CWI report:** Yes **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

Caltrans Quality Assurance Inspector Gabriel Quintana (QA Inspector) arrived at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to observe fabrication and Quality Control Inspectors (QC Inspectors) perform their duties and responsibilities as specified in the contract documents, approved plans, fabrications documents and Special Provisions for this project. While on site the QA Inspector observed the following:

Bay 7- QA Inspector randomly observed ZPMC qualified welder Zhang Quigquan Identification (ID) #044774, utilizing the Flux Core Arc Welding (FCAW) process per the approved Welding Procedure Specification (WPS) WPS-B-T-2232-TC-U4B-F while performing welding on Floor Beams FB016-004 at weld joint FB016-004-045. The QA Inspector observed ZPMC Certified Weld Inspector (CWI) Huang Wen-Pang monitoring welding and preheating parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: welding amperage 307 amps, welding voltage 29 volts. The weld parameters appeared to comply with contract requirements and the approved WPS.

Bay 7- QA Inspector performed ultrasonic verification testing of Floor Beam Sub Assembly complete joint penetration welds joint FB004-001-042, FB004-003-042, FB011-004-042 FB013-001-042, FB013-002-042 and FB013-003-042. The Ultrasonic Testing (UT) was performed to verify that 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002. The weld and base metal were scanned utilizing a Krautkramer Branson USN 60. QA Inspector performed a base metal lamination check using a 25mm diameter 2. 25 MHz transducer and a shear wave scan was using a 20mm x 15mm 2.25 MHz transducer on a 70 degree angle wedge from face A. QA Inspector utilized Scanning patterns A, B, C, and E. For details please see the ultrasonic

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

testing report TL-6027 dated March 10, 2008. QA Inspector found the welds inspected to be in compliance with AWS D1.5- 2002 Table 6.3 and the contract documents.





## **Summary of Conversations:**

General conversation took place between QA and QC Inspectors.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Quintana,Gabriel	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer